

- 62 Do UTEX's CPN policies cause any failures in any AT&T Texas billing system or preclude AT&T Texas from billing access charges to an IXC using or subject to AT&T Texas's switched access services?
- 63 When UTEX receives an 11 Digit CPN (the last 10 of which represent an NPA, an NXX and a line number) by its Customer, must UTEX strip the 1<sup>st</sup> digit if it is a 1, 0 or 9 so that only 10 digits are sent?
- 64 When UTEX is presented with 7 digit CPN (NXX and line number) in a calling area that does not use 10 digit dialing, must UTEX add the 3 digit NPA to the CPN?
- 65 Does the ICA permit UTEX to insert information in the CPN parameter that will allow identification and interworking for CPN based services?
- 66 If so, will or must AT&T Texas to route traffic to the non-geographic number as part of its CPN-based service offerings?
- 67 If so, will or must AT&T Texas route the traffic over the parties' interconnection facilities other than those used for meet point traffic?
- 68 Did the FCC intend and do the FCC's rules support using CPN as a determinative factor for billing between and among Local Exchange Companies and Interexchange Carriers?
- 69 Does the ICA address any requirement(s) with regard to presentation of CPN when a new technology device or platform without its own assigned NANPA phone number originates a communications session with the PSTN?

1 Q: YOU HAVE SAID THAT AT&T HAS REFUSED TO DEAL IN GOOD FAITH  
2 ON ESTABLISHING MUTUAL POLICY REGARDING CPN. WHY IS THIS A  
3 COMPETITIVE ISSUE?

4 A: The refusal to discuss and work toward a mutually accepted policy for caller  
5 identification is a competitive issue because it is one of the flash points in today's competitive  
6 battles between insurgents and incumbents. It is part of one of the most significant policy and  
7 competitive issue in communications. Who controls the pace of technology innovation and  
8 deployment and the amount of freedom users will have in ways to fulfill their communications  
9 needs. AT&T is confronted with potential new competitive threats even though it mostly

1 succeeded in eliminating more traditional rivals. But technology change and the growing  
2 pervasiveness of IP-enabled devices, services and applications poses an even more fundamental  
3 phase shift in communications. Unless it is checked, it will outpace AT&T's ability to pay down  
4 its legacy network costs and deploy its own new technology. Further, the Internet's very nature  
5 of how it operates (it is democratic in that there is no central control, and users themselves  
6 provide intelligence and content) is an affront to the traditional integrated service and delivery  
7 business models of the incumbent communications networks. AT&T must control new  
8 technology deployment and use it at all costs, and is intent on doing so using its home-field  
9 regulatory advantage<sup>33</sup> and by limiting the extent to which those on its legacy network can use or  
10 be reached by new technology. It plans to regulate and bill new insurgents into oblivion. The  
11 legacy tail will wag the new technology dog.

12 I submit that this cannot be allowed. If new technology is allowed to efficiently  
13 interconnect and intercommunicate with legacy networks, and is not saddled with ill-fitting rules  
14 and pricing based on assumptions that simply are not true, then users will immediately enjoy an  
15 incredible array of choices. They will be able to freely pick between and mix and match different  
16 features and functions and services and applications and create their own, unique suite of  
17 solutions. It is the Internet model versus the telephone model. Will society be better off with  
18 centrally controlled, top down, you get what we design and approve, everything is a billing event  
19 and be happy you can pick any color phone you want so long as it is black? Or instead, does  
20 society deserve our model which is edge driven, open, interoperable, modular individual choices,

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<sup>33</sup> **Regulatory capture** is a phenomenon in which a government regulatory agency which is supposed to be acting in the public interest becomes dominated by the vested interests of the existing incumbents in the industry that it oversees. AT&T obviously believes that it has captured this and other regulatory commissions and thus has an advantage on a tilted playing field.

1 at declining prices consistent with Moore's law? I truly am not overstating the case. This matter  
2 exposes AT&T's desire to take our country back in time, before Carterphone, before Execunet,  
3 before the Computer Inquiries, before the seminal antitrust decisions of the 1970s and 1980s.  
4 AT&T never wanted people to be able to use "foreign attachments" – like, say, a modem to get  
5 to the Internet. They failed then. Today AT&T is trying to stop the Internet users from getting to  
6 users on AT&T's network, unless the Internet users agree to pay a non-cost based exorbitant rate  
7 on a per minute basis. Here we go again.

8 **Q; DOESN'T EACH NETWORK ACCESS PROVIDER HAVE THE RIGHT TO**  
9 **CONTROL WHAT ITS USERS DO WITH THE NETWORK, AND CHARGE FOR**  
10 **"ACCESS" TO THOSE USERS WHEN OTHERS COMMUNICATE WITH THEM?**

11 A: No. That is "Bell Head" logic, a carryover from state-sanctioned monopoly days. We  
12 now live in Internet times. If we are going to support new technology the network access  
13 provider cannot be allowed to "own" the users for all purposes. Users own themselves, they are  
14 not owned. Users increasingly want choices regarding what they can do with the network  
15 connectivity they pay AT&T to obtain, and neither they or an alternative supplier should have  
16 the obligation to ask AT&T's permission when users do so.

17 In a competitive market, end users could freely change from one network to another, and  
18 regardless of the network they use they could select from a panoply of technologies, features,  
19 functions and capabilities to fulfill each user's individual needs. They could even move among  
20 and between multiple technologies and networks and applications at the same time, much like  
21 multiple applications and multiple web browser windows running on a computer that can  
22 connect using wireline broadband, or a wireless modem, perhaps even bridging the two.

1           AT&T is using its CPN policy to stop or slow down competition by artificially raising the  
2 cost of using new and different technologies in new and innovative ways and by trying to limit  
3 the usefulness of technology to a 100 year old geographic numbering scheme. To fully grasp  
4 why this is so, you must understand the engineering and technical differences between legacy  
5 telecom networks and policies that require total control on the one hand and the  
6 engineering/technology policies that assume and preserve individual user freedom that is built in  
7 to the new technology. The DNA of the two is completely different. The Internet is not the ocean  
8 that holds sharks trying to eat all swimmers; it is the tide that raises all boats. The TCP/IP  
9 protocol suite is built to be open. It is indifferent to the application, service or use that runs above  
10 it. It is indifferent to the physical or link layer operations below. Telcos hate that, especially  
11 AT&T and especially when the open protocol application is voice, and especially when this  
12 voice protocol is better and cheaper than plain old telephone service.

13           You also have to recognize that we are talking about a fundamental clash of business  
14 models. I am amazed that regulators talk about the importance of "inter-modal" competition  
15 when the real battle is "inter-model." The Telcos emphasize central control, top-down, uniform  
16 product deployment and, most of all, pervasive and overactive billing systems because it all  
17 revolves around billing for minutes and applying differential per minute charges depending on  
18 arbitrary distinctions mostly based on perceived "value of service." The Internet model is much  
19 simpler: attract the user by offering a special, unique product that need not be bundled with all  
20 other related products. Innovate at the edges and encourage user choice and control. Derive value  
21 from virtual presence. The Internet business model is congruent with the stated United States  
22 policy goal of competition in that it makes profit from promoting new and more efficient uses of  
23 existing networks and thus, from an economic perspective is embracing Metcalf's and Reed's

1 laws pertaining to network effects and is improving the utility of the network which is viewed as  
2 a public good. The Telco business model tries to maximize revenue from each individual user  
3 and thus from an economic perspective it tries to "Milk" or "Bleed" the network as a privately  
4 owned and controlled good that it will allow access to and usage of, but only if there is an  
5 excessive and arbitrary fee.

6 **Q: BUT HOW DOES CPN RELATE TO INTER-MODEL COMPETITION?**

7 A: First, you have to know why CPN was developed for the legacy network and recognize  
8 that AT&T is using CPN for purposes other than those intended by its creators. CPN is an SS7  
9 concept. It did not exist when telephone networks used in-band Multi Frequency (MF) signaling.  
10 MF was built to use "Automatic Number Identification" or "ANI" and/or Charge Number  
11 ("CN"). ANI and CN were developed for, among other things, rating. CPN was not. SS7 has  
12 parameters for both ANI/CN and CPN. The FCC recognized this when it was developing its  
13 CPN rules that were designed to encourage "CPN-based services." See, 47 C.F.R. Chapter 64,  
14 Subpart P. The FCC's definitions specifically identify CN and ANI as information elements that  
15 are used for rating and billing. 47 C.F.R. §64.1600(b) and (d). But that concept is not present in  
16 the definition of CPN. 47 C.F.R. §64.1600(c). The FCC's decisions on the CPN rules are all  
17 about CPN-based services, like Caller ID, Call Return, Call Block and Call Trace. Using CPN  
18 for billing is not ever really discussed, because billing and routing was the function of ANI/CN.

19 It is critically important to understand three different things about CPN's historical usage  
20 in the legacy Public Switched Telephone Network:

21 (1) CPN was never designed to be a tool in a billing platform of any sort, but instead  
22 was designed to be a foundation for advanced services:

1 (2) CPN was implemented under the now totally incorrect assumption that users are  
2 passive and cannot or do not want to exercise control over how their identity is represented to the  
3 world;<sup>34</sup>

4 (3) CPN-based services incorrectly assume homogeneous technology across all the  
5 interconnected networks. I will note, however, that SS7 is not totally inflexible or incapable of  
6 interoperation with other platforms. There are ways, but it requires coordination and especially  
7 cooperation by the incumbents, or at least something other than refusal to acknowledge that  
8 things can be and are done in other ways.

9 **Q: HOW IS CPN USED IN VOIP NETWORKS?**

10 A: CPN does not exist in a VoIP network, in the SS7 sense. The notion of what "is" a call  
11 and how a call is made does not require a "phone number," nor does it require homogeneous  
12 technology among and between various types of communications networks. Yes, there is  
13 identity, and "presence" and addressing. But that is not the same as the intended function for  
14 CPN and it is certainly different than AT&T's intended use. Users are now typically identified  
15 by URI address schemes (like SIP:name@domain.tld). Government rationed "numbers" and  
16 access network specific numbering schemes just don't exist. The only time something close to  
17 CPN will exist in a VOIP network is when the VOIP network strives to interoperate with the  
18 PSTN so as to include a PSTN end point in a session. In that instance, and almost without  
19 exception, CPN like information is created and ultimately populated in the IAM parameter by

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<sup>34</sup> AT&T wants to control its users' representation of identity, but for its own purposes often intentionally hides identity. AT&T's business offices consistently suppress CPN delivery. And I am not talking about the mere flipping of the privacy indicator. It is just not there even at the network level, despite the FCC's requirement in 47 C.F.R. § 64.1601(a).

1 either the VOIP user or the VOIP Network operator or application as a matter of its business  
2 policy.<sup>35</sup>

3 **Q: WHY WOULD A VOIP NETWORK TAKE THE TROUBLE TO REPRESENT**  
4 **CPN?**

5 A: While each network may have different reasons, for the most part it is so that CPN-based  
6 services will interoperate. VOIP users still want the utility of CPN based services to work for all  
7 involved: they want to be called back by the non-VOIP user when a call is missed. It has nothing  
8 to do with rating or billing. The VOIP user will represent his cell phone number, his wireline  
9 number, a unified call service number, or something else. I suspect that the VOIP user and the  
10 PSTN called party would at least sometimes prefer that the URI, IM screen name, or an email  
11 address be delivered instead. AT&T won't let that happen. We should all be asking why.

12 **Q: WHAT ARE THE BASIC POLICY ISSUES AND DIFFERENCES RELATED TO**  
13 **CPN REPRESENTATION BETWEEN AND AMONG DIFFERENT TECHNOLOGIES**  
14 **AS IT RELATES TO AT&T AND UTEX?**

15 A: Since AT&T has refused for many years now to take a position or have any kind of  
16 meaningful collaborative discussion about CPN representation policy with UTEX, UTEX has  
17 had to divine the "AT&T Position." To do so, I looked at publicly available statements by  
18 AT&T. The information I looked at include, in chronological order: 1) AT&T's law suits  
19 against Focal and DataVON for fraud on masking or changing CPN on calls; 2) AT&T's  
20 creation of their TIPToP service which is purported to be a wholesale service offering for VOIP  
21 providers who are not carriers; 3) AT&T's lobbying efforts on the so called "Phantom Traffic"  
22 problems; 4) AT&T's patent filing related to creation of a fraud detection billing platform for

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<sup>35</sup> For example, Skype's current policy is to deliver a SKYPE IN number if the SKYPE user has one, or Skype works to represent "0000123456" for population in the CPN parameter.

1 finding "access over local" calls based upon CPN representation and billing for them; and 5)  
2 AT&T's sponsored "Interim Final Solution" in the Missoula proceeding at the FCC. Finally, we  
3 are able to get a glimmer of AT&T's current policy from its allegations in this complaint related  
4 to AT&T's "validity test," the bills sent to UTEX for "invalid" CPN, and the incomplete amount  
5 of call related data they have provided.

6 I will set out below what each of the AT&T public positions really stand for and mean,  
7 and then provide UTEX's position on the issue. It is important to understand that all of this  
8 activity has taken place AFTER the parties had an ICA in place and for the most part developed  
9 while Dockets 26381, 29894, 32041 and now 33323 were already in process. AT&T would not  
10 talk to us, but they were quite obviously talking to themselves about all of this, and developing  
11 their plan. This total lack of communication and absolute refusal to cooperate clearly means they  
12 do not intend to deal or compromise. They have unilaterally developed a plan and they intend to  
13 implement it over our objection, preferably without having to justify their position before this  
14 Commission in any way. That is not how this is supposed to work.

15 To the degree a specific issue is not addressed in our ICA, I believe it is incumbent (pun  
16 intended) on the parties to attempt to work together for a mutual solution, pending  
17 implementation of a replacement agreement that does specify terms and policies. CPN is a subset  
18 of the entire universe of signaling information between the parties. UTEX has been trying to get  
19 the rules for signaling (along with routing and rating) clarified and enforced for six years, both in  
20 the context of the current ICA and the replacement agreement. AT&T has steadfastly refused to  
21 negotiate and has done everything it could to avoid a hearing and formal decision.

22 1) The Focal/DataVON Law Suits: AT&T asserted that that Focal (a CLEC) and DataVON  
23 (a non-carrier VOIP ESP) were working together to intentionally mask and/or change the



1 CPN and other identifying markers in the signaling of the call to AT&T, so as to avoid  
2 payment of access charges.

3 UTEX Position: UTEX believes that all markers (including CPN) on the call serve to identify  
4 the party initiating the call, if any exist, should not be changed, altered or manipulated by any  
5 interconnecting carrier, except where agreed by all parties and the policy surrounding when,  
6 how and why changes are made have been disclosed. As a business practice, UTEX does not  
7 currently nor has it ever changed, alter or modified any signaling information presented to  
8 UTEX by our customers. UTEX believes that interconnecting carriers should be required to  
9 pass all signaling information that it can technically feasibly be passed. Under this policy,  
10 new technology providers could identify their customers even if when the customers do not  
11 have a traditional/legacy phone number. yourchild@SKYPE.com should appear in the caller  
12 name or number field, even if there is no working PSTN phone number. To effectuate this  
13 policy, UTEX requested B-Links for signaling with AT&T both under our existing  
14 agreement and under the terms of the new proposed ICA. Under our proposals, AT&T is  
15 required to dip our name database and populate caller name. AT&T has refused to implement  
16 B-Links under our ICA and has refused to even negotiate any method of direct signaling  
17 interconnection. I will also note that if AT&T had implemented ISDN interconnection,  
18 UTEX would have been able to pass this information. ISDN standards allow all ASCII-like  
19 characters (e.g., letters and numbers) to be represented and the field is not fixed.

20 2) AT&T's Creation of the TIPTOP Tariff: AT&T created a wholesale offering for VOIP  
21 providers. The TIPTOP tariff requires the VOIP provider to obtain a waiver from the FCC  
22 and obtain its own numbers directly from NANP, and to secure an Operating Carrier  
23 Number from NENA. TIPTOP requires that CPN be presented via an SS-7

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1 Interconnection to AT&T and then charges a per minute charge (similar to access)<sup>36</sup> for  
2 each and every call terminated over that interconnection. Further, the TIPTOP Tariff  
3 requires interconnection in each LATA in which it originates and terminates calls and  
4 requires the TIP Top customer to subtend the AT&T Access Tandem for legacy long  
5 distance calls.<sup>37</sup> In essence, AT&T requires the TIPTOP customer to look, act and feel  
6 like a competitive local exchange company except that they pay access for both  
7 origination and termination like an IXC. The tariff can really only be used by AT&T's  
8 VOIP operations since they are the only non-carrier to get both an OCN and  
9 geographically relevant phone numbers from NANP. No one else would want to use the  
10 service anyway.

11 UTEX Position: UTEX is a 100% wholesale provider of service that competes directly  
12 with the AT&T TIPTOP services. Our business policies are starkly different from AT&T's as it  
13 relates to number usage and representation. First, UTEX does not require any regulatory  
14 approval of any kind as a pre-requisite to purchase UTEX services. Second, UTEX does not  
15 require a customer to provide or even have any numbers of their own and we certainly do not  
16 require that UTEX hosts those numbers merely so that UTEX can collect intercarrier  
17 compensation. Third, UTEX does currently require, pursuant to the terms of the IGI POP Tariff  
18 and our business practices, that each of *our customers certify that it is not a carrier* and  
19 *qualifies as an Enhanced Service Provider under federal law*. Like AT&T, UTEX does require

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<sup>36</sup> I say similar to access because AT&T has been given permission to grant Individual Case Based (ICB) pricing for this service. I suspect that AT&T's VOIP operations do not pay full access charges, but any unaffiliated TIP TOP customer most certainly would.

<sup>37</sup> This requirement serves no purpose to the TIP TOP customer. It is there to guarantee that AT&T's local operations will secure traditional access revenues for calls to the TIP TOP customer.

1 that each wholesale IGI POP customer have a presence in each LATA where the customer wants  
2 to send a call or receive a call (we call this "Situs"). Each of these calls is local under the ICA  
3 and from a technical matter cannot be "InterLATA." I also discuss below the changes UTEX  
4 made to its tariff related to CPN policies in December of 2005.

5 UTEX relied on our current ICA when we created the first version of the IGI POP. Our  
6 Customers are NOT carriers and we do not treat them like carriers; we treat them like what they  
7 are: new technology providers looking for termination and origination capabilities to and from  
8 the PSTN. Their services are not ordinary telephone service by definition. We do not  
9 discriminate against them based upon their business or their business plans. Our CPN policy was  
10 simple: "pass what we are given." We also actively sought (as described above) to give more  
11 meaning and utility to what we were given as between the users of each others' networks.

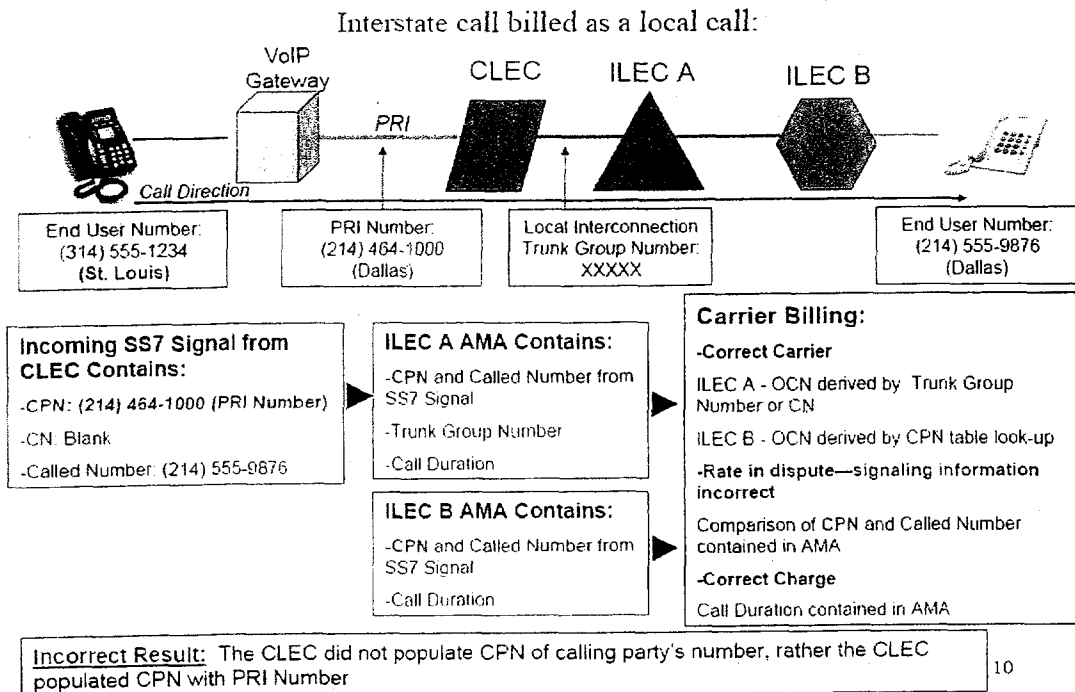
12 3) AT&T's lobbying efforts on the so called "Phantom Traffic" problems: AT&T began  
13 lobbying the FCC on the phantom traffic issues at the same time that they were denying  
14 UTEX's B-Link requests and performing the single joint test on CPN.<sup>38</sup> Interestingly,  
15 AT&T's FCC filing includes two call flow diagrams when it described its issues.<sup>39</sup>  
16 Below is the first AT&T Diagram. Note that AT&T's focus is on how to use CPN and  
17 other signaling information for "Carrier Billing."

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<sup>38</sup> We insisted on that test after we received the first \$638,000 bill for "No CPN" so we could show AT&T we were in fact sending CPN. They were "shocked" to find that in fact we were sending 10 digits on more than 90% of the traffic. AT&T had not yet announced its a "validity test." In fact, the AT&T engineers stated on the test call that they simply checked for "10 numbers." During the call, I again asked, and again AT&T refused to have any discussion whatsoever about a mutual policy on CPN representation.

<sup>39</sup> I find this interesting, because I had been sending call flow diagrams to AT&T and they have refused to accept the notion that a call flow diagram can help resolve our disputes and/or clarify the parties positions on an issue. They acted like call flow diagrams were useless and a waste of time.

## Carrier Billing Example: Phantom Traffic



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A full reading of the AT&T Phantom Traffic presentation also includes many other claims and

policy inferences which speak for themselves. But in part AT&T states:

SBC receives phantom traffic which results in:

- Revenue shortfall of switched access
- Transport facilities
- Usage-based charges
- Increased expenses caused by:
  - Investigating traffic
  - Pursuing recovery
  - What is SBC doing about it?
- SBC formed revenue assurance and fraud detection team
- **Collaborates with other carriers in identifying phantom traffic and responsible carriers (bolded for emphasis)**
- Participates in industry billing forums, e.g., OBF
- State arbitrations
- Litigation
- Advocates appropriate state legislation, e.g., Arkansas

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1 UTEX Position: AT&T's Phantom Traffic presentation at the FCC is significant for many  
2 reasons. First it feigns a complete lack of understanding of the true inter-working issues that exist  
3 between new technology and uses and the legacy PSTN.<sup>40</sup> They cannot claim no one tried to  
4 educate them. We had already been clamoring for collaboration for several years. AT&T – as it  
5 does in this case – just assumes that anything related to new technology is necessarily part of  
6 some kind of fraud related to evasion of lawful access charges.

7 AT&T then promises to stamp out this fraud through various actions, including cases like  
8 Docket 33323. In the AT&T intercarrier world an "Internet Call" or a call that uses Internet  
9 technology, is just a ruse to avoid carrier charges. AT&T then lies about what actions it takes.  
10 AT&T stated that it "Collaborates with other carriers in identifying phantom traffic and  
11 responsible carriers;" but it did nothing close to collaboration with UTEX. SBC literally  
12 slammed the door on any good faith resolution of the actual differences we have with respect to  
13 what they call Phantom Traffic and specifically with respect to how CPN should be represented  
14 by our respective customers who use new technology. For several weeks UTEX sent e-mails to  
15 AT&T personnel and had detailed conference calls with such personnel to attempt to begin a  
16 dialog of how we as interconnecting carriers can establish a mutual policy on CPN.

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<sup>40</sup> UTEX suspects that if and when Judges and Policy Makers "wake up" and realize that the Phantom problems described by AT&T are knowing misrepresentations of the issues and technologies, AT&T will pull the "incompetent boob" defense out. The "incompetent boob" defense was something we as staffers at the PUC in the early 1990's jokingly referred to as acting as if you have bumbling operating and technology skills to run "bad policy" ideas to the regulators. Often this was done in the context of what a new service should cost, how much a rate should be increased, or whether a new service was designed to expressly benefit an affiliate. By having an incompetent or false premise to the policy request, if the policy request was deemed to be unfavorable by the regulators, the requested policy change would be pulled because of the foundation laid by the "incompetent boob" and not because the policy advocated by the ILEC was wrong. Using the "incompetent boob" as the fall back defense for pulling down a "bad policy" request allowed bad policies to be promulgated. Hopefully, when the facts are disclosed, AT&T will be determined to in fact be a "competent boob" and required to atone for and change its anti-competitive practices.

1           Instead of working with UTEX to resolve any true or real open issue related to new  
2   technology signaling and CPN representation, AT&T was acting in bad faith. The latest  
3   manifestation of this bad faith is AT&T's howling about the size of AT&T bills to UTEX.  
4   AT&T to this day has not named any IXC's using our network. AT&T simply refuses to deal or  
5   talk, except through invoices and pleadings.

6           After all of our attempts to work cooperatively were rebuffed, I felt that we had to  
7   unilaterally create and enforce a policy with respect to CPN representation by new technology  
8   providers and users and disclose how we would pass that information to connecting carriers. In  
9   December of 2005, UTEX amended its IGI POP Tariff and added the following terms related to  
10   how IGI POP customers must populate CPN information:

11           6.2.2(A)       Information and Call Control Fields

12       Signaling Layer Translation Service populates the information and call control  
13       fields or parameters (hereinafter "fields") used in SS7 to enable completion of  
14       voice calls and CLASS service functionality between traditional PSTN users and  
15       users of different technology platforms, including but not limited to SIP. The  
16       specific SS7 fields that will be populated using information (if it exists) from  
17       analogous or roughly analogous SIP fields are:

18  
19       6.2.2(A).1       Calling Party Number (CPN). The CPN parameter will be  
20       populated as follows:

21  
22       6.2.2(A).1.a     To the extent that the signaling information contained in the  
23       Internet-based traffic application layer protocol has an identifiable number that  
24       corresponds to a working North America Numbering Plan E.164 address, and is  
25       intended to represent the identity of the party that initiated the session, that  
26       number will be populated in the CPN field, unchanged.

27  
28       6.2.2(A).1.b     To the extent that the signaling information contained in the  
29       Internet-based traffic application layer protocol has a number that appears to  
30       represent an Instant Messaging (IM) client number, Company will populate the  
31       IM client number in the CPN field, unless the IM client number would conflict  
32       with or potentially be confused with a valid NANPA E.164 address.

33  
34       6.2.2(A).1.c     To the extent that the signaling information contained in the  
35       Internet-based traffic application layer protocol has a number that appears to  
36       represent an IP number, Company will populate the IP number in the CPN field,

1 unless the IP number would conflict with or potentially be confused with a valid  
2 NANPA E.164 address.

3  
4 6.2.2(A).1.d Company's IGI-POP Customer or an IP layer peer of the Company  
5 may choose to have Company populate the CPN field with Company's LRN for  
6 the LATA in which the IGI-POP Customer has Situs for initiated sessions that do  
7 not have the information covered by 6.2.2(A).1.a, 6.2.2(A).1.b or 6.2.2(A).1.c  
8 above or if the IM client number or IP number would conflict with or potentially  
9 be confused with a valid NANPA E.164 address. If the IGI-POP customer or IP  
10 layer peer choose to not have Company populate the CPN field with Company's  
11 LRN, then the CPN field will be left null.

12 ...  
13 7.1.2(A).2.b VoIP Customer to PSTN Traffic  
14 IGI-POP service allows IGI-POP Customers to send traffic to the PSTN including  
15 CMRS, LEC and IXC destined users by initiating a call using a NANPA 7 or 10  
16 digit address. Feature Group IP will transmit the Calling Party Number of the  
17 VoIP customer, if one exists and it is possible to do so.

18  
19 UTEX created this policy and amended its approved FCC Tariff as a mark in time so that  
20 if and when we were ever able to get a hearing on the merits with respect to each other's invoices  
21 and business practices, UTEX could show that it has been dealing in an open manner by publicly  
22 stating its policy and practice. Given AT&T's promise to litigate against "Fraudsters" (and its  
23 action against Focal and DataVON), I felt it was wise to publish our business practice with  
24 respect to CPN not only for UTEX's sake, but also for all of our customers so they can rely on  
25 our right to terminate new technology traffic to AT&T users without measured charges. Thus, by  
26 definition, because our business practices are advertised, we (our non-carrier customers and  
27 UTEX) are not engaged in any fraudulent activity.

28 When we were creating the CPN policy, UTEX focused in the technical inter-working  
29 between new technology and old technology. The primary purpose of our policy is to promote  
30 the intended use of CPN representation by carrying it through inter-working between different  
31 technologies. The two overriding purposes behind the creation of SS7-based CPN was to allow  
32 various users to 1) identify the calling party; and 2) make beneficial use of the identifying

1 information.<sup>41</sup> UTEX's policy promotes the representation of the calling party's identity in a  
2 way a PSTN user can understand. Critically important to how UTEX interoperates with AT&T is  
3 that this representation has absolutely nothing to do with either the rating or the routing of the  
4 call. The rating of the call is no compensation due because our non-carrier customer is (1)  
5 meeting us in the LATA in which the call terminates; and (2) our non-carrier customer is  
6 representing that its traffic is exempt and that they are an Enhanced Service Provider.

7 AT&T, however, is trying to use CPN for a different and illegitimate purpose; CPN (or  
8 purported lack thereof) is a tool to collect access from those who employ new technology - ESPs  
9 and their users. This is all an end run around the ESP Exemption and the express "no  
10 compensation" terms in our contract.

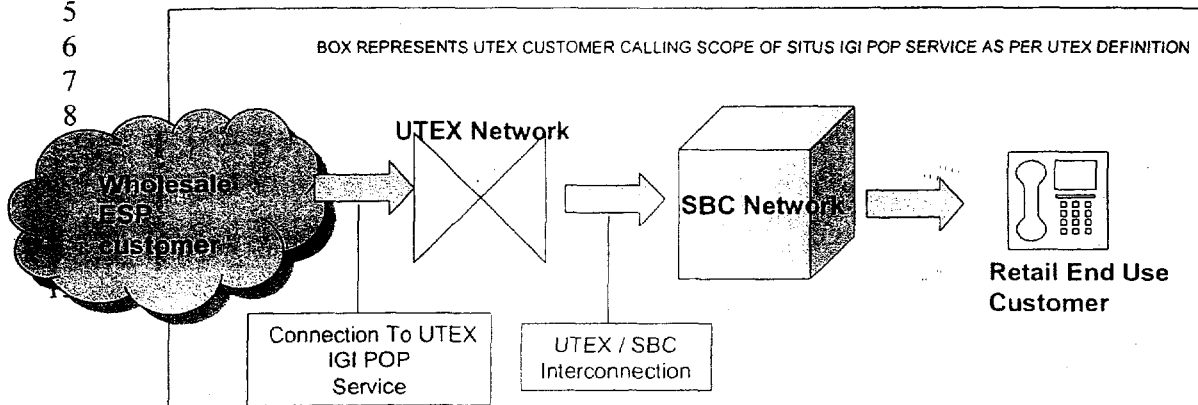
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<sup>41</sup> Today the primary use is to initiate a "call back" using ordinary phone numbers. I personally believe that this is today's primary use only because users are artificially limited in what information they can receive and how that information can be used. In new technology networks, identity representation will be incredibly more useful much like Google is more useful than the ordinary yellow pages.



Below are two of our Call Flow Diagrams submitted in our initial DPL request that most closely resemble the AT&T Call Flow Diagram provided to the FCC by AT&T:

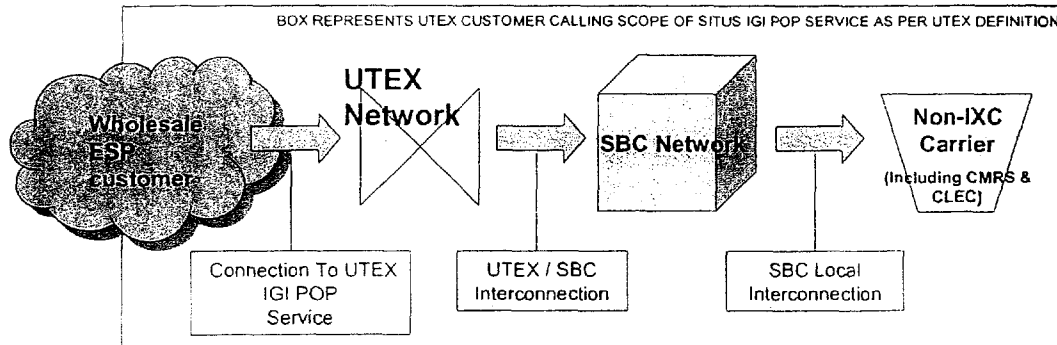
### Call Flow 1: IGI POP Customer to SBC Customer



Call Flow Question	Call Flow Answer
How are calls routed between UTEX and SBC?	
How are calls treated for rating purposes? If calls are interexchange access, how are third parties identified and billed? How is compensation collected and distributed?	
What does the ICA require each party to include in each parameter and/or field of the SS7 ISUP IAM for calls between the two LEC networks?	

Does the nature of the device or platform matter, such as if it is hosted IP Centrex, a hosted IP based ATA Service (e.g. Vonage, Sun Rocket), a hosted bundled Cable Modem service (e.g. Comcast, Time Warner Cable), a wireless IP service (the soon to be Google IP Phone), an IP PBX (3 Com, Cisco, NorTel, etc), an Instant Message platform with Voice (such as Google Talk, Yahoo Voice, Microsoft, Skype), an IP collaboration platform (such as Net Meeting, various conference bridges, directory services and concierge services), separate island services (such as Pulver Media/Free World Dial-up), gaming and appliance services (X-Box, PlayStation, Wii, et cetera) and pre-paid application services to all of the above?

## Call Flow 5: IGI POP Customer to Non-IXC Carrier



Call Flow Question	Call Flow Answer
How are calls routed between UTEX and SBC?	
How are calls treated for rating purposes? If calls are interexchange access, how are third parties identified and billed? How is compensation collected and distributed?	
What does the ICA require each party to include in each parameter and/or field of the SS7 ISUP IAM for calls between the two LEC networks?	

Does the nature of the device or platform matter, such as if it is hosted IP Centrex, a hosted IP based ATA Service (e.g. Vonage, Sun Rocket), a hosted bundled Cable Modem service (e.g. Comcast, Time Warner Cable), a wireless IP service (the soon to be Google IP Phone), an IP PBX (3 Com, Cisco, NorTel, etc), an Instant Message platform with Voice (such as Google Talk, Yahoo Voice, Microsoft, Skype), an IP collaboration platform (such as Net Meeting, various conference bridges, directory services and concierge services), separate island services (such as Pulver Media/Free World Dial-up), gaming and appliance services (X-Box, PlayStation, Wii, et cetera) and pre-paid application services to all of the above?

1       The AT&T Call Flow diagram hypothesizes that the user initiating the voice  
2 communication is physically located in St. Louis and is using an IP PBX.<sup>42</sup> UTEX's call flow  
3 diagrams do not question, nor does UTEX believe it is relevant "where" the user initiating the  
4 call is physically located. IP infrastructure and communications abandon the idea that the  
5 location of any equipment has any correlation or relevance to the identity of the user, the user's  
6 whereabouts or the "rating" of an Internet communication. Internet technology just doesn't care,  
7 and further, there is no purpose in attempting to care.

8       An e-mail server is simply a piece of hardware. If that server is physically located in St.  
9 Louis, that has no bearing on where the users and clients of that e-mail server reside or how they  
10 get to it. Nor is there any requirement that its back-up be in the same location; in fact proper  
11 engineering would dictate that they be in different locations. Nor is there any rule saying or  
12 assuming that the e-mail provider can't pick up his server and move to a different location. It all  
13 just works. Voice over Internet technology, from a purely technical perspective, has the same  
14 characteristics as its e-mail counterpart. Thus the assumption that a user is at the same location as  
15 the "switch" or some device is completely flawed. This is obvious to any boob in the industry  
16 (even AT&T). For example, while AT&T argues at the FCC that geographic relevance is  
17 essential, it tells potential VOIP customers that:

18       One of the ways that VoIP calls are unique is that the notion of geography begins  
19 to fade away. A phone number doesn't necessarily need to be linked to a specific  
20 geographic location. VoIP allows you to have telephone numbers that do not  
21 belong to the geographic area where the phone is physically located.<sup>43</sup>

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<sup>42</sup> An IP PBX is simply one of the application users of UTEX's IGI-POP services can support. The UTEX Call flow diagram lists many more applications, and we anticipate that as technology improves, new applications will be invented.

<sup>43</sup> See [http://www.business.att.com/content/productbrochures/OV-VTN\\_13283\\_V02\\_11-30.pdf](http://www.business.att.com/content/productbrochures/OV-VTN_13283_V02_11-30.pdf).

1 UTEX 's call flow diagram follows the terms in our IGI POP tariff and shows that the  
 2 ESP actually connects to UTEX in the LATA where it wants to have the call terminate to a  
 3 PSTN end point, or where the call originates from a PSTN end point. Our treatment of the call  
 4 for routing and rating is express pursuant to sections 1.2 and 1.4.1 of attachment 12. Here are  
 5 UTEX's answers to the call flow diagram 1:

Call Flow Questions Call Flow Diagram 1	Call Flow Answer
How are calls routed between UTEX and SBC?	Calls are routed as local call over local trunks to the local tandem. This is "Internet" traffic, and is to be treated as local per the express arbitrated and negotiated terms of the ICA.
How are calls treated for rating purposes? If calls are interexchange access, how are third parties identified and billed? How is compensation collected and distributed?	No Compensation due to either party. See ICA sections 1.2 and 1.4.1. This call is not inter exchange access. This is "Internet" traffic, and was to be treated as local per the express arbitrated terms of the ICA, however, by a negotiated amendment, the parties agreed to exempt the traffic from being counted. Regardless of any information passed in signaling, the call has no compensation due based upon the negotiated amendment.
What does the ICA require each party to include in each parameter and/or field of the SS7 ISUP IAM for calls between the two LEC networks?	<p>The Current ICA clearly pre-dates the issues related to exactly what signaling information needs to be passed between the parties and exactly how it should be passed with respect to new technology traffic such as VOIP. Attachment 25 of ISDN Interconnection spells out unique terms related to new technology interconnection. When SS-7 Interconnection is involved the ICA refers to merely being obligated to "pass" the information; then if either party is dissatisfied, the ICA requires the parties to work together, and if unable to work together it applies the local PIU as a surrogate for any billing disputes. The following sections apply:</p> <p><u>2.0 Responsibilities of the Parties</u></p> <p>2.1 Each Party to this Agreement will be responsible for the accuracy and quality of its data as submitted to the respective Parties involved.</p> <p>2.2 Each Party will include in the information transmitted to the other for each call being terminated on the other's network (where available), the originating Calling Party Number (CPN).</p> <p>2.3 The type of originating calling number transmitted depends on the protocol of the trunk signaling used for interconnection. Traditional toll protocol will be used with Multi-Frequency (MF)</p>

signaling, and Automatic Number Identification (ANI) will be sent either from the originating Parties end office switch to the terminating Parties tandem or end office switch. ISDN used for interconnection will be as defined in attachment 25 Appendix ISDN Interconnection.

2.4 Where one Party is passing CPN but the other Party is not properly receiving information, the Parties will cooperatively work to correctly rate the traffic.

7.1 The Parties agree to the measuring and billing procedures in Section 7.1 through 7.5 of this Attachment. In any circumstance not addressed in those Sections, or where the Parties are unable to agree upon a measurement and billing method, the Parties will report the Percentage Local Usage (PLU) to each other for the purposes of measurement and billing for Local Traffic as defined in Section 1.2. SWBT and CLEC will work together to determine the appropriate PLU method. If the audit process associated with the PLU method becomes problematic, the Parties will use the dispute resolution method set out in Section 9.4.2 of the General Terms and Conditions of this Agreement.

7.5 Through July 31, 1998, if the percentage of calls passed with CPN is greater than ninety percent (90%), all calls exchanged without CPN information will be billed as either Local Traffic or IntraLATA Toll Traffic in direct proportion to the minutes of use (MOU) of calls exchanged with CPN information. Effective August 1, 1998, if the percentage of calls passed with CPN is less than 90%, all calls passed without CPN will be billed as IntraLATA Toll Traffic.

After AT&T refused to work with UTEX pursuant to the terms of the ICA, UTEX adopted the following Policy for SS-7 information:

6.2.2(A) Information and Call Control Fields

Signaling Layer Translation Service populates the information and call control fields or parameters (hereinafter "fields") used in SS7 to enable completion of voice calls and CLASS service functionality between traditional PSTN users and users of different technology platforms, including but not limited to SIP. The specific SS7 fields that will be populated using information (if it exists) from analogous or roughly analogous SIP fields are:

6.2.2(A).1 Calling Party Number (CPN). The CPN parameter will be populated as follows:

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	<p>6.2.2(A).1.a To the extent that the signaling information contained in the Internet-based traffic application layer protocol has an identifiable number that corresponds to a working North America Numbering Plan E.164 address, and is intended to represent the identity of the party that initiated the session, that number will be populated in the CPN field, unchanged.</p> <p>6.2.2(A).1.b To the extent that the signaling information contained in the Internet-based traffic application layer protocol has a number that appears to represent an Instant Messaging (IM) client number, Company will populate the IM client number in the CPN field, unless the IM client number would conflict with or potentially be confused with a valid NANPA E.164 address.</p> <p>6.2.2(A).1.c To the extent that the signaling information contained in the Internet-based traffic application layer protocol has a number that appears to represent an IP number, Company will populate the IP number in the CPN field, unless the IP number would conflict with or potentially be confused with a valid NANPA E.164 address.</p> <p>6.2.2(A).1.d Company's IGI-POP Customer or an IP layer peer of the Company may choose to have Company populate the CPN field with Company's LRN for the LATA in which the IGI-POP Customer has Situs for initiated sessions that do not have the information covered by 6.2.2(A).1.a, 6.2.2(A).1.b or 6.2.2(A).1.c above or if the IM client number or IP number would conflict with or potentially be confused with a valid NANPA E.164 address. If the IGI-POP customer or IP layer peer choose to not have Company populate the CPN field with Company's LRN, then the CPN field will be left null.</p>

1  
2 This is how UTEX has been operating its business with respect to routing, rating and  
3 signaling of all traffic to AT&T. I want to emphasize that UTEX has a long standing "Anti-  
4 Fraud" policy which is congruent with new technology users to decide their own representation  
5 for its CPN policy. Our longstanding policy is that UTEX will not change, alter or manipulate in  
6 any way the information provided to our network systems that are used to populate all SS-7  
7 parameters including the CPN parameter. Our policy is that carriers need not apply. Our offer to

000112

1 AT&T has always been that if they find real evidence that some carrier is misusing our service or  
2 our network and provide us that information, we will remove that traffic and work with them to  
3 recover from the offending carrier any access charges that should have been paid. I also want to  
4 emphasize that UTEX has consistently filled out 100% PLU for each and every local/intralata  
5 interconnection trunk.

6 4) AT&T's patent filing for a fraud detection billing program to find "access over local"  
7 calls based upon CPN representation and then billing for those calls based upon a  
8 statistical sample: UTEX has been trying to obtain a negotiated or arbitrated resolution of the  
9 proper ways to signal, route and rate new technology traffic. We have read and studied the law  
10 and other ICAs. We developed an understanding of the technology that is second to none in the  
11 industry. We devised a business plan targeting new technology users and excluding legacy IXC's.  
12 We developed and created an appropriate public policy on the use and representation of the  
13 caller's identity. We sought contract, business and regulatory certainty so we could be the bridge  
14 between old technology users and their services and new technology users and their applications.  
15 AT&T knew it could not survive objective and fair scrutiny of their premises, policies and  
16 positions. So they had to find another path for delay and destruction. AT&T has tried to patent its  
17 definition of fraud and monopolize the prosecution and conviction (no fair trial, just a hanging)  
18 of those it wishes to eliminate. And they are using that method in this case.

19 AT&T theorizes that anyone using new technology is committing fraud if they do not pay  
20 access to AT&T. So AT&T created a Black Box<sup>44</sup> that employs unspecified statistical measures  
21 to "catch fraudulent calls" and then bill interconnecting carriers for access. Once AT&T deems  
22 fraud to exist, they don't have to prove fraud against the accused, or even make an accusation of

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<sup>44</sup> Its patent filing is woefully short on detail.

1 fraud against the party they are accusing. They just send a bill they will not explain, justify or  
2 prove up. And then they impose an embargo. This is a very clever boob. Very clever. Very anti-  
3 competitive and very wrong.

4 UTEX Response: To date AT&T has been able to not give UTEX any real information despite  
5 all of our efforts. In a real business setting, we would get a meaningful bill that conveyed useful  
6 information. UTEX is trying to look inside the black box so we can understand its premises,  
7 assumptions, measurement metrics, logic, input and output. In a real legal setting, this is called  
8 "discovery." We have also requested an audit, but AT&T refused.

9 UTEX has not requested, has not used and does not owe money for access services from  
10 AT&T.

11 **5) AT&T's sponsored "Interim Final Solution" in the Missoula proceeding at the**  
12 **FCC:** Armed with its new top secret black box fraud detection tool, AT&T went to the FCC in  
13 the inter-carrier compensation docket and proposed an "Interim Final Solution"<sup>45</sup> which would  
14 address and solve the "Phantom Traffic" problem it lobbied on in the previous years.

15 Under the "Interim Final Solution" a carrier would have to exist on both ends of every  
16 voice communications using the PSTN, and a geographically relevant "valid number" would  
17 have to be assigned to each and every call attempt. From a billing perspective, there could not be  
18 any cross breeding of VOIP and PSTN traffic. All calls would be billed again

19 **UTEX Response:** Just like its previous lobby attempts at the FCC, AT&T reeks of a lack of  
20 understanding of how VOIP applications work and what the real issues are related to inter-  
21 working new technology and business plans with old technology and business plans. AT&T's  
22 solution makes firm the ability of legacy carriers to bill for every call. It is the preeminent issue.

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<sup>45</sup> Yes, that was the title. And it is an apt name. AT&T would use this proposed policy to eradicate the competitive scourge of VOIP which is ruining the purity of the PSTN.



1 It does not solve the technical problem of interoperation. It justifies the right to bill with a black  
2 box, which inherently assumes new technology is fraudulent. This was way too protectionist to  
3 be from the mind of a boob.

4 To expose the proposal as the sham that it is, we created a detailed working model of how  
5 all signaling information can pass between and among new technology networks and legacy  
6 networks. We invented the Universal Tele-traffic Exchange – affectionately called “The  
7 UTE<sub>x</sub>.”<sup>46</sup> The essence of the invention is a new technology IAM parameter for identity. We  
8 have proved its inter-working capabilities among and between SS-7 and SIP. Numbers of any  
9 kind do not need to exist, but each and every call can be uniquely identified to a user. Further,  
10 the original purpose for CPN is codified in that CPN and IAP and UGT (the later two are the  
11 signaling markings we invented and which will be present on every call) are not to be used by  
12 our technology for billing purposes. They serve inter-operation purposes. But if carriers have  
13 contract terms that allow for billing, and those terms rely on identification of the caller, then the  
14 UTE<sub>x</sub> gives the ILECs what they need to implement the contract terms. They just need to look.  
15 Below is a Pictorial representation of the numerous, and voluminous efforts of UTE<sub>x</sub> to fix and  
16 solve the CPN issues. The problem is there really is no problem, There is only an incumbent  
17 throwing wrenches the wheel of progress which is Internet enabled voice communication.

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<sup>46</sup> Our FCC Filing and subsequent comment letters and ex parte filings are included in the exhibits for this section.